

Kindergarten
Utah Core State Standards
Mathematics Curriculum Map
Granite School District

*Striving toward greater focus and coherence through
Content Standards and Practice Standards*

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How to Read the Grade Level Content Standards

Standards define what students should understand and be able to do.

Strands are larger groups of related standards. Standards from different strands may sometimes be closely related.


Strand



Strand: COUNTING AND CARDINALITY (K.CC)



Know number names and the counting sequence (**Standards K.CC.1–3**). Count to tell the number of objects (**Standards K.CC. 4–5**). Identify and compare quantities of objects and numerals (**Standards K.CC.6–7**).

- **Standard K.CC.1** Count to 100 by ones and by tens.
 - **Standard K.CC.2** Count forward beginning from a given number within the known sequence (instead of having to begin at 1).
 - **Standard K.CC.3** Read and write numbers using base ten numerals from 0 to 20.
Represent a number of objects with a written numeral, in or out of sequence (0 represents a count of no objects).
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Standard

Standards for Mathematical Practice

The Standards for Mathematical Practice in Kindergarten describe mathematical habits of mind that teachers should seek to develop in their students. Students become mathematically proficient in engaging with mathematical content and concepts as they learn, experience, and apply these skills and attitudes (Standards K.MP.1–8).

Standard K.MP.1 Make sense of problems and persevere in solving them.

Explain the meaning of a problem, look for entry points to begin work on the problem, and plan and choose a solution pathway. When a solution pathway does not make sense, look for another pathway that does. Explain connections between various solution strategies and representations. Upon finding a solution, look back at the problem to determine whether the solution is reasonable and accurate, often checking answers to problems using a different method or approach.

Standard K.MP.2 Reason abstractly and quantitatively.

Make sense of quantities and their relationships in problem situations. Contextualize quantities and operations by using images or stories. Decontextualize a given situation and represent it symbolically. Interpret symbols as having meaning, not just as directions to carry out a procedure. Know and flexibly use different properties of operations, numbers, and geometric objects.

Standard K.MP.3 Construct viable arguments and critique the reasoning of others.

Use stated assumptions, definitions, and previously established results to construct arguments. Explain and justify the mathematical reasoning underlying a strategy, solution, or conjecture by using concrete referents such as objects, drawings, diagrams, and actions. Listen to or read the arguments of others, decide whether they make sense, ask useful questions to clarify or improve the arguments, and build on those arguments.

Standard K.MP.4 Model with mathematics.

Identify the mathematical elements of a situation and create a mathematical model that shows the relationships among them. Identify important quantities in a contextual situation, use mathematical models to show the relationships of those quantities, analyze the relationships, and draw conclusions. Models may be verbal, contextual, visual, symbolic, or physical.

Standard K.MP.5 Use appropriate tools strategically.

Consider the tools that are available when solving a mathematical problem, whether in a real-world or mathematical context. Choose tools that are relevant and useful to the problem at hand, such as drawings, diagrams, technologies, and physical objects and tools, as well as mathematical tools such as estimation or a particular strategy or algorithm.

Standard K.MP.6 Attend to precision.

Communicate precisely to others by crafting careful explanations that communicate mathematical reasoning by referring specifically to each important mathematical element, describing the relationships among them, and connecting their words clearly to representations. Calculate accurately and efficiently, and use clear and concise notation to record work.

Standard K.MP.7 Look for and make use of structure.

Recognize and apply the structures of mathematics such as patterns, place value, the properties of operations, or the flexibility of numbers. See complicated things as single objects or as being composed of several objects.

Standard K.MP.8 Look for and express regularity in repeated reasoning.

Notice repetitions in mathematics when solving multiple related problems. Use observations and reasoning to find shortcuts or generalizations. Evaluate the reasonableness of intermediate results.

GSD Instructional Resources

- [Helping Students Master the Basic Facts](#)
- [How Can I Use the Problem of the Day as a Self-Start?](#)
- [How Can I Build Ongoing Math Review and Practice?](#)
- [How Can I Implement Tasks Using a Go Math Lesson?](#)
- [Mathematical Practice Standards 1-8](#)
- [Math Routines](#)
- [Problem Types](#)
- [Bar Model Drawing](#)
- [Writing in Math](#)
- [Depth of Knowledge \(DOK\)](#)
- [Math Homework](#)
- [Levels of Geometric Thinking](#)
- [Rubrics](#)

GSD Additional Instructional Resources Website

- [Navigating Go Math User Guide](#)
- [Newsletters](#)

Additional Resources

- [PBS Kids – Curious George](#)
- [Kelly's Kindergarten](#)
- [Education Place – Math Lingo Review Game](#)
- [Utah Core State Standards for Mathematics K-5](#)
- [Learning Progressions for CCSSM](#)
- [Math Vocabulary Cards](#)
- [Elementary Mathematics Core Guides](#)

General Website Resources

- [Curriculum Maps Appendix](#)

Kindergarten Mathematics Curriculum Map

Granite School District Scope and Sequence Overview

Unit of Study	Go Math! Alignment	Go Math! Chapter Title	Strand and Standards
1	Chapter 1	Represent, Count, and Write Numbers 0 to 5	Strand: Counting and Cardinality Standards: 3, 4a, 4b, 4c Strand: Operations and Algebraic Thinking Standard: 3
2	Chapter 2	Compare Numbers to 5	Strand: Counting and Cardinality Standard: 6
3	Chapter 3	Represent, Count, and Write Numbers 6 to 9	Strand: Counting and Cardinality Standards: 3, 5, 6
4	Chapter 4	Represent and Compare Numbers to 10	Strand: Counting and Cardinality Standards: 2, 3, 5, 6, 7 Strand: Operations and Algebraic Thinking Standard: 4
5	Chapter 5	Addition	Strand: Operations and Algebraic Thinking Standards: 1, 2, 3, 4, 5
6	Chapter 6	Subtraction	Strand: Operations and Algebraic Thinking Standards: 1, 2, 5
7	Chapter 7	Represent, Count, and Write 11 to 19	Strand: Counting and Cardinality Standard: 3 Strand: Number and Operations in Base Ten Standard: 1
8	Chapter 8	Represent, Count, and Write 20 and Beyond	Strand: Counting and Cardinality Standards: 1, 2, 3, 5
9	Chapter 9	Identify and Describe Two-Dimensional Shapes	Strand: Geometry Standards: 2, 4, 6
10	Chapter 10	Identify and Describe Three-Dimensional Shapes	Strand: Geometry Standards: 1, 2, 3, 4
11	Chapter 11	Measurement	Strand: Measurement and Data Standards: 1, 2
12	Chapter 12	Classify and Sort Data	Strand: Measurement and Data Standard: 3

Kindergarten

Instruction and Assessment Schedule

2018-2019

It is expected that the units will be taught consecutively. The table below reflects which units and standards are assessed. Kindergarten KEEP Entry and Exit Assessments, and a Mid-Year Assessment are required by GSD. Additional assessment options are on each Unit of Study in the GSD maps. Student progress will be reported at the end of each quarter.

Approx. Number of Days of Instruction	17	10	15		13	18	13			18	16	12		13	9	10		End of Year	
Instructional Content	Unit of Study 1	Unit of Study 2	Unit of Study 3	Quarter 1 10/25 End of Quarter Progress Report	Unit of Study 4	Unit of Study 5	Unit of Study 6	Quarter 2 1/10 End of Quarter Progress Report	GSD Mid-Year Assessment 12/3 – 1/10 (required)	Unit of Study 7	Unit of Study 8	Unit of Study 9	Quarter 3 3/21 End of Quarter Progress Report	Unit of Study 10	Unit of Study 11	Unit of Study 12	Quarter 4 5/23 End of Quarter Report	KEEP ENTRY 8/6 – 8/8 (required)	Getting Ready for Gr. 1 Unit
Math Standards	K.CC.1 *K.CC.3 *K.CC.4 K.CC.5 *K.CC.6 K.CC.7 *K.OA.3			Quarter 1 10/25 End of Quarter Progress Report	K.CC.1 K.CC.2 *K.CC.3 *K.CC.5 *K.CC.6 *K.CC.7 K.OA.1 *K.OA.2 *K.OA.3 K.OA.4 K.OA.5			Quarter 2 1/10 End of Quarter Progress Report	GSD Mid-Year Assessment 12/3 – 1/10 (required)	K.CC.1 *K.CC.2 *K.CC.3 K.CC.4 *K.CC.5 *K.NBT.1 K.G.2 *K.G.4 *K.G.6			Quarter 3 3/21 End of Quarter Progress Report	K.MD.1 *K.MD.2 *K.MD.3 *K.G.1 K.G.2 K.G.3 *K.G.4 K.G.5			Quarter 4 5/23 End of Quarter Report	KEEP EXIT 5/6 – 5/10 (required)	

*Indicates emphasized standards.

Beginning and Ending of Quarters	
1 st Quarter	Aug 20, 2018 – Oct 25, 2018
2 nd Quarter	Oct 29, 2018 – Jan 10, 2019
3 rd Quarter	Jan 14, 2019 – Mar 21, 2019
4 th Quarter	Mar 27, 2019 – May 23, 2019

Kindergarten Mathematics Curriculum Map - Overview

[Lesson Plan Format:](#)

[Lesson Plan Format with Go Math! References:](#)

[Lesson Plan Format for Tasks](#)

Unit of Study	The mathematical content is sequenced in Units of Study that will take approximately 2-3 weeks each to teach. The sequence of Units of Study provides a coherent flow to mathematics instruction throughout the year. It is expected that the units will be taught consecutively.
Go Math! Alignment	The primary textbook adopted in Granite School District for Grades K-6 is Houghton Mifflin Harcourt's Go Math!, 2015 Edition.
Math Content and Language Objectives	The Math Content Objectives and Language Objectives are to be posted for each lesson, restated to students during the lesson, and revisited at the end of each lesson. These are written as "I Can" statements. Suggested Math Language Objectives can be located on the next page.
Key Concepts for Differentiation 0—*	In an effort to assist teachers in the process of differentiation in Tier I teaching, key concepts have been identified in the curriculum maps as those specific objectives a teacher would focus on during small group instruction with struggling students. Key concepts cover minimum, basic skills and knowledge every student must master. Key concepts are NOT an alternative to teaching the entire Utah State Core Standards, rather they emphasize which concepts to prioritize for differentiation.
Vocabulary	Vocabulary cards for instruction and word walls can be found at: http://www.graniteschools.org/mathvocabulary/
Progressions Documents	The Learning Progressions Documents are anchor documents to the Math Core Standards. These research-based documents describe the progression of each math core strand across various grade levels. They were written by the authors of the CCSSM to offer more in-depth explanation and details regarding the Math Core Standards. Click here to access these documents.
Additional Resources	The websites are a resource for lesson plans, teacher tutorials, content videos, student applets, and games. <i>GSD Additional Teacher Resources</i> are available to Granite School District teachers only. These resources are NOT intended to be all-inclusive. It is the teacher's responsibility to teach the Utah Core State Standards for Mathematics content, not the resources.
Assessment	There are many formative and summative assessment options: <ul style="list-style-type: none"> • Go Math! Options: Prerequisite Skills Inventory; Beginning-of-Year, Middle-of-Year, and End-of-Year Benchmark Tests; Show What You Know Diagnostic Assessments; Diagnostic Interview Assessments; Portfolio Assessment; Mid-Chapter Checkpoints; Chapter Review/Tests; Chapter Tests; Performance Assessments; Quick Checks; and, Personal Math Trainer. The assessments provide immediate feedback that can be used for Tier 2 and/or Tier 3 interventions for individual students. The results may also be used to identify concepts for reteaching the whole class if needed. • GSD Mid-Year Assessment – This assessment is cumulative for multiple Units of Study during the first Semester. Students not mastering the content will need Tier 2 and/or Tier 3 interventions. • KEEP Entry and Exit Assessments are required at the beginning and end of the year. • Exit slips, teacher observations, daily class work, homework, and basal assessments are to be used at the teacher's discretion to help guide and direct instruction.

Math Language Objectives



[Note: The following language objectives must be written in student-friendly terms, adapted to specific lessons, and aligned with the language needs of students.]

Reading Standards for Informational Text

- Ask and answer questions about key details in a math text.
- Describe the connection between ideas or information in a math text.
- Ask and answer questions about unknown math words in a text.
- Describe the relationship between pictures and text.
- Identify basic similarities and differences between images and texts on the same math topic.
- Engage in group reading activities of math texts

Writing Standards

- Use a combination of drawing, dictating, and writing to compose opinion pieces on math topics.
- Use a combination of drawing, dictating, and writing to compose explanatory texts, providing some information on a math topic.
- Use digital tools to produce math writing and collaborate with others.
- Participate in math writing projects.

Speaking and Listening Standards

- Participate in collaborative conversations about math topics.
- Ask and answer questions about key details or information presented orally or through other media.
- Ask and answer questions in order to seek help, get information, or clarify something that is not understood.
- Add drawings to math descriptions to provide detail.
- Speak audibly and express math ideas clearly.

Unit of Study 1	Kindergarten	Quarter 1	Approx. 13 – 17 days	GSD Math 6/1/18
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Strand: Counting and Cardinality K.CC

Know number names and the count sequence.

3. Read and write numbers using base ten numerals from 0 to 20. Represent a number of objects with a written numeral, in or out of sequence (0 representing a count of no objects).

Count to tell the number of objects.

4. Understand the relationship between numbers and quantities; connect counting to cardinality.

- a. When counting objects, say the numbers in the standard order. Pair each quantity of objects with one and only one number, and each number with the correct quantity of objects.
- b. Understand that the last number name said represents the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.
- c. Understand that each successive number refers to a quantity that is one greater than the previous number.

Strand: Operations and Algebraic Thinking K.OA

Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.

3. Decompose numbers less than or equal to 10 into pairs in more than one way by using objects or drawings. Record each decomposition by a drawing or equation. *For example, $5 = 2 + 3$ and $5 = 4 + 1$.*

Math Content Objectives	Vocabulary	Vocabulary (cont.)
<p>I can:</p> <p>K.CC.3 (Up to 9)</p> <ul style="list-style-type: none"> • Write numbers. ☞ Count objects and write the number. <p>K.CC.4a (Up to 9)</p> <ul style="list-style-type: none"> • Count objects in a group and say the number. <p>K.CC.4b</p> <ul style="list-style-type: none"> ☞ Tell how many are in a group by counting to the last number. • Count the objects in any way they are set up. (moved, rearranged, hidden) <p>K.CC.4c</p> <ul style="list-style-type: none"> • Know when I count objects the numbers are getting larger because the group is getting larger. <p>K.OA.3 (up to 5)</p> <ul style="list-style-type: none"> ☞ Decompose numbers into number pairs. • Show number pairs with drawings. • Write number pairs with equations. <p>☞ Key Concepts for Differentiation - See p. 6.</p>	<ul style="list-style-type: none"> • and • count • decompose • different • digit • fewer • five • four • larger • match • more • number • number pair • numeral • object • one 	<ul style="list-style-type: none"> • quantity • three • two • zero

Go Math! Utah Core Alignment	Unit of Study 1 – Additional Resources
<u>Lesson 1.1</u> K.CC.4a	Model and Count 1-5 IXL - Numbers and Counting Up to 5: Count to 5 - Assessment
<u>Lesson 1.2</u> K.CC.3	IXL - Represent Numbers Up to 5 - Assessment Illuminations - "Let's Count to Five" Unit
<u>Lesson 1.3</u> K.CC.4a	Illustrative Mathematics – Shake and Spill – Teacher Directed Activity Education Place - eManipulatives Connecting Cubes UEN - "Recognizing Numerals and Numbers" Lesson
<u>Lesson 1.4</u> K.CC.3	UEN - "Writing Numerals" Lesson Count to Five - Lesson
<u>Lesson 1.5</u> K.CC.4a	Zero YouTube - Sesame Street - Zero the Hero YouTube - Zero the Hero by Joan Holub - Book Preview Meaning of Zero Lesson
<u>Lesson 1.6</u> K.CC.4b	GSD Additional Teacher Resources Quack - Game
<u>Lesson 1.7</u> K.OA.3	Number Cards Math and Literature
<u>Lesson 1.8</u> K.CC. 4c	
<u>Lesson 1.9</u> K.CC.3	
<u>Lesson 1.10</u> K.CC.3	

Unit of Study 1 - Additional Resources - Continued

Literature

Arctic Fives Arrive by Elinor Pinczes
Count the Ways to Get Around: Learning to Count to 5 by Joan Chapman
Five Creatures by Emily Jenkins
Five Little Ducks by Pamela Paparone
Five Little Monkeys Jumping on the Bed by Eileen Christelow
Five Little Monkeys Sitting in a Tree by Eileen Christelow
Five Little Penguins Slipping on the Ice by Steve Metzger
Five Little Pumpkins by Iris Van Rynbach
Five Ugly Monsters by Tedd Arnold
Seven Blind Mice by Ed Young
The Very Hungry Caterpillar by Eric Carle
Zero by Kathryn Otoshi
Zero is the Leaves on the Tree by Betsy Franco
Zero the Hero by Joan Holub

Assessment Options

- **Go Math! Assessment Options:** Show What You Know Diagnostic Assessment; Mid-Chapter Checkpoint; Quick Checks; Portfolio Assessment; Chapter 1 Review/Test; Chapter 1 Test; Diagnostic Interview Assessment; Personal Math Trainer.
- **Daily/Weekly Formative Assessment Options:** Exit Slips, Observation, Daily Work, Homework.

Unit of Study 2	Kindergarten	Quarter 1	Approx. 8 – 10 days	GSD Math 6/1/18
Strand: Counting and Cardinality				K.CC
Identify and compare quantities of objects and numerals.				
6. Use matching or counting strategies to identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group. Include groups with up to ten objects.				
Math Content Objectives	Vocabulary			
<p>I can:</p> <p><u>K.CC.6</u></p> <ul style="list-style-type: none"> ☛ Tell if one group is greater than, less than, or equal to another group. (Up to 5 - 1st Quarter) (Up to 10 - 2nd Quarter) ☛ Key Concepts for Differentiation - See p. 6. 	<ul style="list-style-type: none"> • alike • compare • equal • fewer • five • four • greater than • less • less than • match • more • object • one • same • same number • three • two 			

Go Math! Utah Core Alignment	Unit of Study 2 - Additional Resources
<p><u>Lesson 2.1</u> K.CC.6</p> <p><u>Lesson 2.2</u> K.CC.6</p> <p><u>Lesson 2.3</u> K.CC.6</p> <p><u>Lesson 2.4</u> K.CC.6</p> <p><u>Lesson 2.5</u> K.CC.6</p>	<p>Comparing Numbers 1-5 PBS Kids - Curious George's Busy Day - Bug Catcher Game Education Place - eManipulatives Connecting Cubes Education Place - More, Fewer, Same - Student Tutorial</p> <p>GSD Additional Teacher Resources Who Has More - Game Number Cards</p> <p>Literature More, Fewer, Less by Tana Hoban</p>
<p>Assessment Options</p>	<ul style="list-style-type: none"> • Go Math! Assessment Options: Show What You Know Diagnostic Assessment; Mid-Chapter Checkpoint; Quick Checks; Portfolio Assessment; Chapter 2 Review/Test; Chapter 2 Test; Diagnostic Interview Assessment; Personal Math Trainer. • Daily/Weekly Formative Assessment Options: Exit Slips, Observation, Daily Work, Homework.

Unit of Study 3	Kindergarten	Quarter 1	Approx. 12 – 15 days	GSD Math 6/1/18
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Strand: Counting and Cardinality **K.CC**

Know number names and the count sequence.
 3. Read and write numbers using base ten numerals from 0 to 20. Represent a number of objects with a written numeral, in or out of sequence (0 representing a count of no objects).
Count to tell the number of objects.
 5. Use counting to answer questions about “how many.” For example, 20 or fewer objects arranged in a line, a rectangular array, or a circle, 10 or fewer objects in a scattered configuration. Using a number from 1–20, count out that many objects.
Identify and compare quantities of objects and numerals.
 6. Use matching or counting strategies to identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group. Include groups with up to ten objects.
 7. Compare two numbers between 1 and 10 presented as written numerals using “greater than,” “less than,” or “equal to.”

Math Content Objectives	Vocabulary	
<p>I can:</p> <p><u>K.CC.3</u> (up to 9)</p> <ul style="list-style-type: none"> • Write numbers. ☛ Count objects and write the number. <p><u>K.CC.5</u></p> <ul style="list-style-type: none"> • Count and tell “How Many?” are in a group. • Show a number with objects. <p><u>K.CC.6</u></p> <ul style="list-style-type: none"> • Tell if one group is greater than, less than, or equal to another group. (Up to 5 - 1st Quarter) (Up to 10 - 2nd Quarter) <p><u>K.CC.7</u> (between 1-5)</p> <ul style="list-style-type: none"> • Compare two written numbers and find the one that is greater. • Compare two written numbers and find the one that is less. <p>☛ Key Concepts for Differentiation - See p. 6.</p>	<ul style="list-style-type: none"> • and • count • decompose • digit • eight • greater than • less than • match • more • nine • number • number pair • numeral • object • row • seven • six 	

Go Math! Utah Core Alignment	Unit of Study 3 - Additional Resources
<p><u>Lesson 3.1</u> K.CC.5</p> <p><u>Lesson 3.2</u> K.CC.3</p> <p><u>Lesson 3.3</u> K.CC.5</p> <p><u>Lesson 3.4</u> K.CC.3</p> <p><u>Lesson 3.5</u> K.CC.5</p> <p><u>Lesson 3.6</u> K.CC.3</p> <p><u>Lesson 3.7</u> K.CC.5</p> <p><u>Lesson 3.8</u> K.CC.3</p> <p><u>Lesson 3.9</u> K.CC.6 K.CC.7</p>	<p><u>Model and Count 6-9</u> Toy Theater - How Many - Game Education Place - eManipulatives Connecting Cubes UEN - "Recognizing Numerals and Numbers" Lesson UEN - "Writing Numerals" Lesson Teaching Channel – Tell Me Everything About - Video Georgia Standards Frameworks – Unit 1 Lessons</p> <p><u>GSD Additional Teacher Resources</u> Count the Room – Halloween Boo !</p> <p><u>Literature</u> Let's Go Visiting by Sue Williams</p>
<p>Assessment Options</p>	<ul style="list-style-type: none"> • Go Math! Assessment Options: Show What You Know Diagnostic Assessment; Mid-Chapter Checkpoint; Quick Checks; Portfolio Assessment; Chapter 3 Review/Test; Chapter 3 Test; Diagnostic Interview Assessment; Personal Math Trainer. • Daily/Weekly Formative Assessment Options: Exit Slips, Observation, Daily Work, Homework.

Unit of Study 4	Kindergarten	Quarter 2	Approx. 10 – 13 days	GSD Math 6/1/18
Strand: Counting and Cardinality				K.CC
<p>Know number names and the count sequence.</p> <p>2. Count forward beginning from a given number within the known sequence (instead of having to begin at 1).</p> <p>3. Read and write numbers using base ten numerals from 0 to 20. Represent a number of objects with a written numeral, in or out of sequence (0 representing a count of no objects).</p> <p>Count to tell the number of objects.</p> <p>5. Use counting to answer questions about “how many.” For example, 20 or fewer objects arranged in a line, a rectangular array, or a circle, 10 or fewer objects in a scattered configuration. Using a number from 1–20, count out that many objects.</p> <p>Identify and compare quantities of objects and numerals.</p> <p>6. Use matching or counting strategies to identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group. Include groups with up to ten objects.</p> <p>7. Compare two numbers between 1 and 10 presented as written numerals using “greater than,” “less than,” or “equal to.”</p>				
Strand: Operations and Algebraic Thinking				K.OA
Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.				
4. Make sums of 10 using any number from 1 to 9. For example, $2 + 8 = 10$. Use objects or drawings to represent and record the answer.				
Math Content Objectives	Vocabulary	Vocabulary (cont.)		
<p>I can:</p> <p>K.CC.2 (up to 50)</p> <ul style="list-style-type: none"> Count forward from any number. <p>K.CC.3 (up to 10)</p> <ul style="list-style-type: none"> Write numbers. Count objects and write the number. <p>K.CC.5 (up to 10)</p> <ul style="list-style-type: none"> Count and tell “How Many?” are in a group. Show a number with objects. <p>K.CC.6 (up to 10)</p> <ul style="list-style-type: none"> Tell if one group is greater than, less than, or equal to another group. <p>K.CC.7 (up to 10)</p> <ul style="list-style-type: none"> Compare two written numbers and find the one that is greater. Compare two written numbers and find the one that is less. <p>K.OA.4</p> <ul style="list-style-type: none"> Show how to make ten starting at a smaller number. Show an answer with a drawing. Write an answer with an equation. 	<ul style="list-style-type: none"> and compare count decompose digit eight equal fewer five four greater than larger less than <p>Key Concepts for Differentiation - See p. 6.</p>	<ul style="list-style-type: none"> make ten match more nine number number pair numeral object one same seven six ten three two 		

Go Math! Utah Core Alignment	Unit of Study 4 – Additional Resources
<u>Lesson 4.1</u> K.CC.5	Model and Count to 10 PBS Kids - Curious George's Busy Day - Flower Garden Game
<u>Lesson 4.2</u> K.CC.3	PBS Kids - Curious George's Busy Day - Meatball Launcher Game PBS Kids - Curious George's Busy Day - Hide and Seek Game PBS Kids - Curious George - Count Your Chickens Game
<u>Lesson 4.3</u> K.OA.4	Fun 4 The Brain - Big Sea Count - Counting Game IXL - Count to 10 - Assessment Cookie - What Number Missing - Game
<u>Lesson 4.4</u> K.CC.2	ABCya! - Counting Fish - Game Toy Theater - Space Race - Game Illuminations - Concentration - Interactive Applet
<u>Lesson 4.5</u> K.CC.6	Illuminations - "Let's Count to Ten" Unit Education Place - eManipulatives Counters Education Place - eManipulatives Connecting Cubes
<u>Lesson 4.6</u> K.CC.6	UEN - "Recognizing Numerals and Numbers" Lesson UEN - "Writing Numerals" Lesson Kidport - Numbers - Finding Groups of Things from 1 to 10 - Game
<u>Lesson 4.7</u> K.CC.7	A to Z Teacher Stuff - Counting and Numbers - Lessons
	Comparing Numbers 1-10 PBS Kids - Curious George's Busy Day - Bug Catcher Game Inkless Tales - What Number Teacher-Directed Activity
	Education Place - More, Fewer, Same - Student Tutorial Compare to Find if There is Enough Lesson Compare Using More Than And The Same As Lesson
	Compare Using Fewer Than And The Same As Lesson Learn Zillion – Comparing Labeling Greater Than, Less Than Video Learn Zillion – Are the Group Equal Video
	GSD Additional Teacher Resources Who Has More Count the Room - Thanksgiving Ways to Make 4, 5, 6, 7, and 8
	From Here to There

Unit of Study 4 - Additional Resources - Continued

Literature

A-Counting We will Go by Rozanne Lanczak Williams
Anno's Counting Book by Mitsumasa Anno
Big Fat Hen by Keith Baker
Christmas for 10 by Cathryn Falwell
Chrysanthemum by Kevin Henkes
Click, Clack, Splash, Splash by Doreen Cronin
Count! by Denise Fleming
Dinner at Panda Palace by Stephanie Calmenson
Emeka's Gift by Ifeoma Onyefulu
Every Buddy Counts by Stuart J. Murphy
Feast for 10 by Cathryn Falwell
I Hunter by Pat Hutchins
Just Enough Carrots by Stuart J. Murphy
Moja Means One: Swahili Counting Book by Muriel Feelings
Monster Math by Anne Miranda
Monster Math Picnic by Grace Maccarone
Mouse Count by Ellen Stoll Walsh
One Hungry Monster by Susan Heyboer O'Keefe
One Witch by Laura Leuck
Over in the Meadow by Olive A. Wadsworth
Ten Black Dots by Donald Crews
Ten Flashing Fireflies by Philemon Sturges
10 for Dinner by Jo Ellen Bogart
Ten Red Apples by Pat Hutchins
We All Went on Safari by Laurie Krebs
What's in the Garden? By Jessica Baron

Assessment Options

- **Go Math! Assessment Options:** Show What You Know Diagnostic Assessment; Mid-Chapter Checkpoint; Quick Checks; Portfolio Assessment; Chapter 4 Review/Test; Chapter 4 Test; Diagnostic Interview Assessment; Personal Math Trainer.
- **Daily/Weekly Formative Assessment Options:** Exit Slips, Observation, Daily Work, Homework.

Strand: Operations and Algebraic Thinking	K.OA
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Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.

- 1. Represent addition and subtraction with objects, fingers, mental images, drawings, or sounds.** *For example, use clapping, act out situations, and use verbal explanations, expressions, or equations.*
- 2. Solve addition and subtraction word problems within 10. Use objects or drawings to represent the problem.**
- 3. Decompose numbers less than or equal to 10 into pairs in more than one way by using objects or drawings. Record each decomposition by a drawing or equation** *For example, $5 = 2 + 3$ and $5 = 4 + 1$.*
- 4. Make sums of 10 using any number from 1 to 9.** *For example, $2 + 8 = 10$.* **Use objects or drawings to represent and record the answer.**
- 5. Fluently add and subtract using numbers within 5.**

Math Content Objectives	Vocabulary	Vocabulary (cont.)
<p>I can:</p> <p><u>K.OA.1</u></p> <ul style="list-style-type: none"> • Can add using <u>objects</u>. • Can subtract using <u>objects</u>. <p><u>K.OA.2</u></p> <ul style="list-style-type: none"> ☛ Can use objects to solve addition story problems. • Can use drawings to solve addition story problems. • Can use objects to solve subtraction story problems. • Can use drawings to solve subtraction story problems. <p><u>K.OA.3</u> (up to 10)</p> <ul style="list-style-type: none"> ☛ Decompose numbers into number pairs. • Show number pairs with drawings. • Write number pairs with equations. <p><u>K.OA.4</u></p> <ul style="list-style-type: none"> • Show how to make ten starting at a smaller number. • Show an answer with a drawing. • Write an answer with an equation. <p><u>K.OA.5</u></p> <ul style="list-style-type: none"> • Add within 5. • Subtract within 5. <p>☛ Key Concepts for Differentiation - See p. 6.</p>	<ul style="list-style-type: none"> • add • addend • and • count on • decompose • eight • equal • equation • expression • five • four • make ten • nine • number pair • object • one • plus 	<ul style="list-style-type: none"> • seven • six • sum • ten • three • two

Go Math! Utah Core Alignment	Unit of Study 5 - Additional Resources
<p>Lesson 5.1 K.OA.1</p> <p>Lesson 5.2 K.OA.1</p> <p>Lesson 5.3 K.OA.1</p> <p>Lesson 5.4 K.OA.5</p> <p>Lesson 5.5 K.OA.4</p> <p>Lesson 5.6 K.OA.5</p> <p>Lesson 5.7 K.OA.2</p> <p>Lesson 5.8 K.OA.3</p> <p>Lesson 5.9 K.OA.3</p> <p>Lesson 5.10 K.OA.3</p> <p>Lesson 5.11 K.OA.3</p> <p>Lesson 5.12 K.OA.3</p>	<p>Addition to 10 PBS Kids - Curious George's Busy Day - Museum of Tens Game Ambleside Primary School - Number Bonds Machine - Practice Education Place - Using Symbols to Add - Student Tutorial Education Place - Addition Facts Through Ten - Student Tutorial HMH School Publishers - Adding Bricks - Game Education Place - eManipulative Number Line Education Place - eManipulatives Counters Education Place - eManipulatives Connecting Cubes UEN - "More or Less Pigs in the Pen" Lesson Georgia Standards Frameworks – Unit 5 Lessons Learn Zillion – Take Apart Numbers Within 5 - Video Learn Zillion – Take From Within 5 – Video Teaching Channel – 3 Act Tasks: Modeling Addition</p> <p>GSD Additional Teacher Resources Make a Ten Number Cards Ways to Make 4, 5, 6, 7, 8, and 9 Count the Room – Ocean Creatures</p> <p>Literature Animals on Board by Stuart J. Murphy Cat Show by Jayne Harvey Counting at the Zoo by Laurie Chilek Fish Eyes: A Book You Can Count On by Lois Ehlert Math Fables by Greg Tang More or Less by Rebecca Fjelland Davis One Guinea Pig Is Not Enough by Kate Duke</p>
<p>Assessment Options</p>	<ul style="list-style-type: none"> • Go Math! Assessment Options: Show What You Know Diagnostic Assessment; Mid-Chapter Checkpoint; Quick Checks; Portfolio Assessment; Chapter 5 Review/Test; Chapter 5 Test; Diagnostic Interview Assessment; Personal Math Trainer. • Daily/Weekly Formative Assessment Options: Exit Slips, Observation, Daily Work, Homework.

Unit of Study 6	Kindergarten	Quarter 2	Approx. 10 – 13 days	GSD Math 6/1/18
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Strand: Operations and Algebraic Thinking K.OA

Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.
1. Represent addition and subtraction with objects, fingers, mental images, drawings, or sounds. *For example, use clapping, act out situations, and use verbal explanations, expressions, or equations.*
2. Solve addition and subtraction word problems within 10. Use objects or drawings to represent the problem.
5. Fluently add and subtract using numbers within 5.

Math Content Objectives	Vocabulary	
<p>I can:</p> <p><u>K.OA.1</u></p> <ul style="list-style-type: none"> • Can add using <u>objects</u>. • Can subtract using <u>objects</u> <p><u>K.OA.2</u></p> <ul style="list-style-type: none"> • Can use objects to solve addition story problems. • Can use drawings to solve addition story problems. • Can use objects to solve subtraction story problems. • Can use drawings to solve subtraction story problems. <p><u>K.OA.5</u></p> <ul style="list-style-type: none"> • Add within 5. • Subtract within 5. <p>• Key Concepts for Differentiation - See p. 6.</p>	<ul style="list-style-type: none"> • difference • equal • equation • expression • minus • subtract • take away 	

Go Math! Utah Core Alignment	Unit of Study 6 - Additional Resources
<p><u>Lesson 6.1</u> K.OA.1</p> <p><u>Lesson 6.2</u> K.OA.1</p> <p><u>Lesson 6.3</u> K.OA.1</p> <p><u>Lesson 6.4</u> K.OA.5</p> <p><u>Lesson 6.5</u> K.OA.5</p> <p><u>Lesson 6.6</u> K.OA.2</p> <p><u>Lesson 6.7</u> K.OA.2</p>	<p><u>Subtraction to 10</u> Education Place - Subtraction Facts Through 10 - Student Tutorial Education Place - eManipulatives Connecting Cubes ICT Games - Soccer Subtraction - Games UEN - "Gulping Down Subtraction" Ten Sly Piranhas Lesson UEN - "Sensational Subtraction Centers" Lesson</p> <p><u>GSD Additional Teacher Resources</u> Count the Room – Let It Snow Stack and Snap Number Cards</p> <p><u>Literature</u> Elevator Magic by Stuart J. Murphy How Many Feet in the Bed by Diane Johnston Hamm How Many Mice? by Michael Garland Little Quacks Hide and Seek by Lauren Thompson Monster Musical Chairs by Stuart J. Murphy More or Less by Rebecca Fjelland Davis Pete the Cat and His Four Groovy Buttons by James Dean Splash! by Ann Jonas Ten Little Fish by Audrey Wood & Bruce Wood Ten Sly Piranhas by William Wise Turtle Splash! Countdown at the Pond by Cathryn Falwell</p>
<p>Assessment Options</p>	<ul style="list-style-type: none"> • Go Math! Assessment Options: Show What You Know Diagnostic Assessment; Mid-Chapter Checkpoint; Quick Checks; Portfolio Assessment; Chapter 6 Review/Test; Chapter 6 Test; Diagnostic Interview Assessment; Personal Math Trainer. • Daily/Weekly Formative Assessment Options: Exit Slips, Observation, Daily Work, Homework.

Unit of Study 7	Kindergarten	Quarter 3	Approx. 13 – 18 days	GSD Math 6/1/18
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Strand: Counting and Cardinality K.CC

Know number names and the count sequence.
 3. Read and write numbers using base ten numerals from 0 to 20. Represent a number of objects with a written numeral, in or out of sequence (0 representing a count of no objects).

Strand: Number and Operations in Base Ten K.NBT

Compose and decompose numbers 11–19 to gain foundations for place value.
 1. Compose and decompose numbers from 11 to 19 into ten ones and some further ones. Use objects or drawings and record each composition or decomposition by a drawing or equation. *For example, $18 = 10 + 8$. Understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.*

Math Content Objectives	Vocabulary	
<p>I can:</p> <p><u>K.CC.3</u> (up to 20)</p> <ul style="list-style-type: none"> • Write numbers. ☞ Count objects and write the number. <p><u>K.NBT.1</u></p> <ul style="list-style-type: none"> ☞ Make numbers 11 -19 with ten ones and some more ones. ☞ Take apart numbers 11 – 19 to show ten ones and some more ones. • Draw a picture to show ten ones and some more ones. • Write an equation to show ten ones and some more ones. <p>☞ Key Concepts for Differentiation - See p. 6.</p>	<ul style="list-style-type: none"> • and • compose • decompose • digit • eighteen • eleven • equal • equation • fifteen • fourteen • make ten • nineteen • number • number pair • numeral • ones • seventeen • sixteen • ten • thirteen • twelve 	

Go Math! Utah Core Alignment	Unit of Study 7 - Additional Resources
<p>Lesson 7.1 K.NBT.1</p> <p>Lesson 7.2 K.CC.3</p> <p>Lesson 7.3 K.NBT.1</p> <p>Lesson 7.4 K.CC.3</p> <p>Lesson 7.5 K.NBT.1</p> <p>Lesson 7.6 K.CC.3</p> <p>Lesson 7.7 K.NBT.1</p> <p>Lesson 7.8 K.CC.3</p> <p>Lesson 7.9 K.NBT.1</p> <p>Lesson 7.10 K.CC.3</p>	<p>Model and Count 11-19 PBS Kids - Curious George's Busy Day - Apple Picking Game Education Place - eManipulatives Counters UEN - "Recognizing Numerals and Numbers" Lesson UEN - "Writing Numerals" Lesson UEN - "Numbers Through the Year" Lesson EngageNY- Show, Count, and Write to 20 – Lesson 13 EngageNY – Show, Count, and Write to 20 – Lesson 14 Georgia Standards Frameworks – Unit 1 - Lessons Georgia Standards Frameworks – Unit 2 – Lessons</p> <p>GSD Additional Teacher Resources Learn Zillion Video List – K.NBT.1 Number Cards</p> <p>Literature Bears at the Beach: Counting 10 - 20 by Niki Yektai Count and See by Tana Hoban Counting is for the Birds by Frank Mazzola, Jr. Dragon Naps by Lynne Bertrand The Handmade Counting Book by Laura Rankin Monster Munches by Laura Numeroff Teeth, Tails, & Tentacles: An Animal Counting Book by Christopher Wormell Twelve Days of Christmas by Jan Brett Twelve Days of Kindergarten by Deborah Lee Rose</p>
<p>Assessment Options</p>	<ul style="list-style-type: none"> • Go Math! Assessment Options: Show What You Know Diagnostic Assessment; Mid-Chapter Checkpoint; Quick Checks; Portfolio Assessment; Chapter 7 Review/Test; Chapter 7 Test; Diagnostic Interview Assessment; Personal Math Trainer. • Daily/Weekly Formative Assessment Options: Exit Slips, Observation, Daily Work, Homework.

Know number names and the count sequence.

- Count to 100 by ones and by tens.
- Count forward beginning from a given number within the known sequence (instead of having to begin at 1).
- Read and write numbers using base ten numerals from 0 to 20. Represent a number of objects with a written numeral, in or out of sequence (0 representing a count of no objects).

Count to tell the number of objects.

- Understand the relationship between numbers and quantities; connect counting to cardinality.
 - When counting objects, say the numbers in the standard order. Pair each quantity of objects with one and only one number, and each number with the correct quantity of objects.
 - Understand that the last number name said represents the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.
 - Understand that each successive number refers to a quantity that is one greater than the previous number.
- Use counting to answer questions about “how many.” For example, 20 or fewer objects arranged in a line, a rectangular array, or a circle, 10 or fewer objects in a scattered configuration. Using a number from 1–20, count out that many objects.

Math Content Objectives	Vocabulary	Vocabulary (cont.)
<p>I can:</p> <p><u>K.CC.1</u> (up to 100)</p> <ul style="list-style-type: none"> Count by ones. Count to 100 by tens. <p><u>K.CC.2</u> (up to 100)</p> <ul style="list-style-type: none"> Count forward from any number. <p><u>K.CC.3</u> (up to 20)</p> <ul style="list-style-type: none"> Write numbers. Count objects and write the number. <p><u>K.CC.5</u></p> <ul style="list-style-type: none"> Count and tell “How Many?” are in a group. Show a number with objects. <p>Key Concepts for Differentiation - See p. 6.</p>	<ul style="list-style-type: none"> compare count digit eight eighteen eleven fewer fifteen fifty five four fourteen greater than larger less than more nine nineteen 	<ul style="list-style-type: none"> number numeral object one one hundred ones seven seventeen six sixteen ten tens thirteen three twelve twenty two

Go Math! Utah Core Alignment	Unit of Study 8 – Additional Resources
<u>Lesson 8.1</u> K.CC.5	<u>Model and Count 20</u> PBS Kids - Curious George's Busy Day - Counting with Allie Game
<u>Lesson 8.2</u> K.CC.3	Cookie - What Number Missing - Game UEN - "Recognizing Numerals and Numbers" Lesson UEN - "Writing Numerals" Lesson
<u>Lesson 8.3</u> K.CC.2	EngageNY- Show, Count, and Write to 20 – Lesson 13 EngageNY – Show, Count, and Write to 20 – Lesson 14 Georgia Standards Frameworks – Unit 1 - Lessons Georgia Standards Frameworks – Unit 2 - Lessons
<u>Lesson 8.4</u> K.CC.6 (above core)	Learn Zillion – Rote Counting to 20
<u>Lesson 8.5</u> K.CC.1	<u>Comparing Numbers to 20</u> Inkless Tales - What Number Teacher-Directed Activity Georgia Standards Frameworks – Unit 2 – Lessons
<u>Lesson 8.6</u> K.CC.1	<u>Count by Ones to 100</u> PBS Kids - Curious George's Busy Day - Bunny Ride Game Education Place - Count, Represent, and Recognize Numbers 0-31 - Student Tutorial
<u>Lesson 8.7</u> K.CC.1	HMH School Publishers - Count Along to 100 - Interactive Applet YouTube - Macarena Count to 100 with Dr. Jean - Song
<u>Lesson 8.8</u> K.CC.1	<u>Count by Tens to 100</u> Education Place - eManipulatives Hundred Chart
	<u>GSD Additional Teacher Resources</u> Hug & Squeeze - Game Count the Room – Valentine's Day

Unit of Study 8 - Additional Resources - Continued

Literature

- Chicka Chicka 123 by Bill Martin Jr.
- Curious George Learns to Count from 1 to 100 by H. A. Rey
- From One to One Hundred by Teri Sloat
- How Many How Many How Many by Rick Walton
- The Icky Bug Counting Book by Jerry Pallotta
- Let's Count It Out, Jesse Bear by Nancy White Carlstrom
- Miss Bindergarten Celebrates the 100th Day of Kindergarten by Joseph Slate
- Monster Math by Anne Miranda
- One Guinea Pig Is Not Enough by Kate Duke
- One Moose, Twenty Mice by Clare Beaton
- One...Two...Three...Sassafras! by Stuart J. Murphy
- 100 Days of Cool by Stuart J. Murphy
- 100 School Days by Anne Rockwell
- One Woolly Wombat by Rod Trinca and Kerry Argent
- 100th Day Worries by Margery Cuyler
- The Twelve Days of Kindergarten by Deborah Lee Rose
- Twenty is too Many by Kate Duke

Assessment Options

- **Go Math! Assessment Options:** Show What You Know Diagnostic Assessment; Mid-Chapter Checkpoint; Quick Checks; Portfolio Assessment; Chapter 8 Review/Test; Chapter 8 Test; Diagnostic Interview Assessment; Performance Assessment Chapters 1-8; Personal Math Trainer.
- **Daily/Weekly Formative Assessment Options:** Exit Slips, Observation, Daily Work, Homework.

Strand: Geometry	K.G
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Identify and describe shapes, including squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres.
 2. Correctly name shapes regardless of their orientations or overall size.
Analyze, compare, create, and compose shapes.
 4. Analyze, compare, and sort two- and three-dimensional shapes and objects, in different sizes and orientations, using informal language to describe their similarities, differences and other attributes (for example, color size, shape, number of sides).
 6. Compose simple shapes to form larger shapes. For example, “Can you join these two triangles with full sides touching to make a rectangle?”

Math Content Objectives	Vocabulary	
<p>I can:</p> <p><u>K.G.2</u></p> <ul style="list-style-type: none"> Name shapes. Name shapes that are turned in different ways. <p><u>K.G.4</u></p> <ul style="list-style-type: none"> Compare two-dimensional and three-dimensional shapes. ☛ Tell how shapes are alike or different. <p><u>K.G.6</u></p> <ul style="list-style-type: none"> ☛ Put shapes together to make new shapes. Put shapes together to make bigger shapes. <p>☛ Key Concepts for Differentiation - See p. 6.</p>	<ul style="list-style-type: none"> alike attribute circle compare compose curve different flat hexagon rectangle same shape side sides of equal length sort square triangle two-dimensional shape vertex (plural - vertices; “corners”) 	

Go Math! Utah Core Alignment	Unit of Study 9 – Additional Resources
<u>Lesson 9.1</u> K.G.2	<p><u>Identifying 2-Dimensional Shapes (Circle, Triangle, Square, Rectangle, Hexagon)</u> Kiz Club - Shapes - Student Tutorial Education Place - Plane Shapes - Student Tutorial UEN - "Triangles, Triangles, Triangles" Lesson</p>
<u>Lesson 9.2</u> K.G.4	<p>K-5 Math Teaching Resources – Pattern Block Barrier Game Georgia Standards Frameworks – Unit 3 Lessons Teaching Channel – Which Shape Doesn't Belong - Video</p>
<u>Lesson 9.3</u> K.G.2	<p><u>Sorting 2-Dimensional Shapes</u> Education Place - Identify and Sort Basic Plane Shapes - Student Tutorial</p>
<u>Lesson 9.4</u> K.G.4	<p>K-5 Math Teaching Resources – Describing 2D Shapes Georgia Standards Frameworks – Unit 3 Lessons</p>
<u>Lesson 9.5</u> K.G.2	<p><u>Compose Simple Shapes to Form Larger Shapes</u> PBS Kids - Sid the Science Kid - Game</p>
<u>Lesson 9.6</u> K.G.4	<p>NLVM - Tangrams - Interactive Applet Georgia Standards Frameworks – Unit 3 Lessons</p>
<u>Lesson 9.7</u> K.G.2	<p><u>GSD Additional Teacher Resources</u> Speedy Space Shapes - Game</p>
<u>Lesson 9.8</u> K.G.4	
<u>Lesson 9.9</u> K.G.2	
<u>Lesson 9.10</u> K.G.4	
<u>Lesson 9.11</u> K.G.4	
<u>Lesson 9.12</u> K.G.6	

Unit of Study 9 - Additional Resources - Continued

Literature

- Bear in a Square by Stella Blackstone
- Button Box by Margarete Reed
- Cat Show by Jayne Harvey
- Circles by Jan Kottke
- Circles, Triangles and Squares by Tana Hoban
- Circus Shapes by Stuart J. Murphy
- I See Shapes by Marcia Fries
- Icky Bug Shapes by Jerry Pallotta
- Mouse Shapes by Ellen Stoll Walsh
- Rectangles by Jennifer S. Burke
- The Secret Birthday Message by Eric Carle
- Shape Spotters by Megan E. Bryant
- Shapes, Shapes, Shapes by Tana Hoban
- 3 Little Firefighters by Stuart J. Murphy
- When a Line Bends... a Shape Begins by Rhonda Greene

Assessment Options

- **Go Math! Assessment Options:** Show What You Know Diagnostic Assessment; Mid-Chapter Checkpoint; Quick Checks; Portfolio Assessment; Chapter 9 Review/Test; Chapter 9 Test; Diagnostic Interview Assessment; Personal Math Trainer.
- **Daily/Weekly Formative Assessment Options:** Exit Slips, Observation, Daily Work, Homework.

Unit of Study 10	Kindergarten	Quarter 4	Approx. 12 – 13 days	GSD Math 6/1/18
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Strand: Geometry K.G.

Identify and describe shapes, including squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres.

1. Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as *above*, *below*, *beside*, *in front of*, *behind*, and *next to*
2. Correctly name shapes regardless of their orientations or overall size.
3. Identify shapes as two-dimensional (“flat”) or three-dimensional (“solid”).

Analyze, compare, create, and compose shapes.

4. Analyze, compare, and sort two- and three-dimensional shapes and objects in different sizes and orientations, using informal language to describe their similarities, differences, and other attributes (for example, color, size, shape, number of sides).
5. Model and create shapes from components such as sticks and clay balls.

Math Content Objectives	Vocabulary	Vocabulary (cont.)
<p>I can:</p> <p><u>K.G.1</u> ☞ Name the shapes in the world. ☞ Use words to tell where a shape is located.</p> <p><u>K.G.2</u></p> <ul style="list-style-type: none"> • Name shapes. • Name shapes that are turned in different ways. <p><u>K.G.3</u></p> <ul style="list-style-type: none"> • Tell if a shape is two-dimensional or three-dimensional. <p><u>K.G.4</u> ☞ Compare two-dimensional and three-dimensional shapes.</p> <ul style="list-style-type: none"> • Tell how shapes are alike or different. <p><u>K.G.5</u></p> <ul style="list-style-type: none"> • Model and create shapes. <p>☞ Key Concepts for Differentiation - See p. 6.</p>	<ul style="list-style-type: none"> • above • behind • below • beside • between • by • circle • cone • cube • curved surface • cylinder • flat surface • hexagon • in front of • next to • rectangle • roll 	<ul style="list-style-type: none"> • shape • slide • solid shape • sort • sphere • square • stack • three-dimensional shape • triangle • two-dimensional shape

Go Math! Utah Core Alignment	Unit of Study 10 - Additional Resources
<u>Lesson 10.1</u> K.G.4	Identifying 3-Dimensional Shapes (Cube, Cone, Cylinder, Sphere) Math Learning Center – “Geometry: 3-D Shapes” Unit HMH School Publishers - Solid Figure Factory - Interactive Applet
<u>Lesson 10.2</u> K.G.2	UEN - “Geometric Solids” Lesson K-5 Math Teaching Resources – 3D Shapes Book
<u>Lesson 10.3</u> K.G.2	Sorting 2-Dimensional and 3-Dimensional Shapes Georgia Standards Frameworks – Unit 3
<u>Lesson 10.4</u> K.G.2	Positional/Location Words Education Place - Positional Words - Student Tutorial PBS Kids - Which Clifford? - Game
<u>Lesson 10.5</u> K.G.2	UEN - “Ins and Outs of Tops and Bottoms” Lesson
<u>Lesson 10.6</u> K.G.3	GSD Additional Teacher Resources Speedy Space Shapes - Game Building Shapes Recording Sheet
<u>Lesson 10.7</u> K.G.5	Literature <u>Block City</u> by Robert Louis Stevenson <u>Captain Invincible and the Space Shapes</u> by Stuart J. Murphy
<u>Lesson 10.8</u> K.G.1	<u>Cubes, Cones, Cylinders, & Spheres</u> by Tana Hoban <u>Each Peach Pear Plum</u> by Janet and Allan Ahlberg <u>Jump, Frog, Jump!</u> by Robert Kalan
<u>Lesson 10.9</u> K.G.1	<u>Math Counts: Sorting</u> by Henry Arthur Pluckrose <u>Rosie’s Walk</u> by Pat Hutchins <u>Shapes</u> by Henry Arthur Pluckrose <u>The Shape of Things</u> by Dayle Ann Dodds <u>What’s In My Pocket?</u> by Rozanne Lanczak Williams <u>Where’s That Bone?</u> by Lucille Recht Penner
Assessment Options	<ul style="list-style-type: none"> • Go Math! Assessment Options: Show What You Know Diagnostic Assessment; Mid-Chapter Checkpoint; Quick Checks; Portfolio Assessment; Chapter 10 Review/Test; Chapter 10 Test; Diagnostic Interview Assessment; Performance Assessment Chapters 9-10; Personal Math Trainer. • Daily/Weekly Formative Assessment Options: Exit Slips, Observation, Daily Work, Homework.

Unit of Study 11	Kindergarten	Quarter 4	Approx. 8 – 9 days	GSD Math 6/1/18
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Strand: Measurement and Data K.MD

Describe and compare measurable attributes of objects.
 1. Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.
 2. Directly compare two objects with a measurable attribute in common, to see which object has “more of”/“less of” the attribute, and describe the difference. *For example, directly compare the length of two pencils and describe one as shorter or longer.*

Math Content Objectives	Vocabulary	
<p>I can:</p> <p><u>K.MD.1</u></p> <ul style="list-style-type: none"> • Tell the attributes of an object that can be measured. <p><u>K.MD.2</u></p> <ul style="list-style-type: none"> ☞ Compare objects by length. ☞ Compare objects by weight. • Measure and compare two objects. <p>☞ Key Concepts for Differentiation - See p. 6.</p>	<ul style="list-style-type: none"> • attribute • bigger • compare • heavier • height • length • lighter • longer • same height • same length • same weight • shorter • smaller • taller • weight 	

Go Math! Utah Core Alignment	Unit of Study 11 - Additional Resources
<p>Lesson 11.1 K.MD.2</p> <p>Lesson 11.2 K.MD.2</p> <p>Lesson 11.3 K.MD.2</p> <p>Lesson 11.4 K.MD.2</p> <p>Lesson 11.5 K.MD.1</p>	<p><u>Describing Measurable Attributes</u> SoftSchools - Long and Short - Practice SoftSchools - Tall and Short - Practice IXL - Compare Size, Weight, Capacity - Assessment UEN - "Hunting for 'Measured' Treasure" Lesson Georgia Standards Frameworks – Unit 4 K-5 Math Teaching Resources – Measurement Sentence Frames K-5 Math Teaching Resources – Comparing Towers</p> <p><u>GSD Additional Teacher Resources</u> Measurement Activity Count the Room – Ocean Creatures</p> <p><u>Literature</u> The Dragon’s Scales: A Math Reader by Sarah Albee Heavy and Light by Joan Chapman Is it Larger? Is It Smaller? by Tana Hoban The Long and Short of It by Cheryl Nathan Math Counts: Weight by Henry Arthur Pluckrose Mighty Maddie by Stuart J. Murphy Who’s Short? Who’s Tall? by Kailee Herbst</p>
<p>Assessment Options</p>	<ul style="list-style-type: none"> • Go Math! Assessment Options: Show What You Know Diagnostic Assessment; Mid-Chapter Checkpoint; Quick Checks; Portfolio Assessment; Chapter 11 Review/Test; Chapter 11 Test; Diagnostic Interview Assessment; Personal Math Trainer. • Daily/Weekly Formative Assessment Options: Exit Slips, Observation, Daily Work, Homework.

Unit of Study 12	Kindergarten	Quarter 4	Approx. 9 – 10 days	GSD Math 6/1/18
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Strand: Measurement and Data K.MD

Classify objects and count the number of objects in each category.
 3. Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. Limit the category counts to less than or equal to 10.

Math Content Objectives	Vocabulary	
<p>I can:</p> <p><u>K.MD.3</u></p> <ul style="list-style-type: none"> o→ Classify objects into groups. o→ Count the number of objects in a group. o→ Answer questions about the groups. <p>o→ Key Concepts for Differentiation - See p. 6.</p>	<ul style="list-style-type: none"> • alike • category • classify • count • data • different • fewer • graph • more • object • shape • size • sort 	

Go Math! Utah Core Alignment	Unit of Study 12 - Additional Resources
<p><u>Lesson 12.1</u> K.MD.3</p> <p><u>Lesson 12.2</u> K.MD.3</p> <p><u>Lesson 12.3</u> K.MD.3</p> <p><u>Lesson 12.4</u> K.MD.3</p> <p><u>Lesson 12.5</u> K.MD.3</p> <p><u>Lesson 12.6</u> K.MD.3</p>	<p><u>Classify and Count by Color, Shape, and Size</u> PBS Kids - Sid the Science Kid - Sorting Box Activity Chateau Meddybemps - The Pumpkin Patch - Teacher-Led Activity NLVM - Color, Shape, and Size - Interactive Applet PBS Kids - Curious George's Busy Day - Hat Grab Game PBS Kids - Curious George - I Love Shapes Game K-5 Math Teaching Resources – 2D Shape Sort K-5 Math Teaching Resources – Which Has More? K-5 Math Teaching Resources – Button Sort Georgia Standards Frameworks – Unit 4 Lessons Illustrative Mathematics – Sort and Count I Illustrative Mathematics – Sort and Count II Learn Zillion – Sort Shapes Learn Zillion – Understand that Shapes can be Sorted and Counted Learn Zillion – Fluently Sort and Counts Shapes into a Category</p> <p><u>GSD Additional Teacher Resources</u></p> <p><u>Literature</u> The Button Box by Margarett S. Reid Grandma's Button Box by Linda Williams Aber Gray Rabbits Odd One Out by Alan Baker More or Less a Mess by Sheila Keenan</p>
<p>Assessment Options</p>	<ul style="list-style-type: none"> • Go Math! Assessment Options: Show What You Know Diagnostic Assessment; Mid-Chapter Checkpoint; Quick Checks; Portfolio Assessment; Chapter 12 Review/Test; Chapter 12 Test; Diagnostic Interview Assessment; Performance Assessment Chapters 11-12; Personal Math Trainer. • Daily/Weekly Formative Assessment Options: Exit Slips, Observation, Daily Work, Homework.

Appendix

General Website Resources

Instructional Support

[Learning Progressions for CCSM](#)
[Utah Core State Standards for Mathematics K-5](#)
[Utah Core State Standards for Mathematics 6-12](#)
[Georgia Standards of Excellence \(Activities and Lessons\)](#)
[Create a Graph](#)
[ThemeSpark \(Rubric Generator\)](#)
[K-2 Assessments Hawaii](#)
[UEN](#)
[Illuminations](#)
[Van de Walle - Blackline Masters](#)
[YouCubed](#)
[Math Their Way Assessment](#)
[Engage New York \(website\)](#)
[Ask Dr. Math](#)
[Education Place](#)
[Math.com](#)
[Math is Fun](#)
[Core Academy Teacher-Created Tasks](#)
[Online Math Learning \(Grade Specific\)](#)
[Illustrating the Standards for Mathematical Practice](#)
[Common Core Standards - Official Website](#)
[North Carolina Department of Public Instruction - Common Core Instructional Support Tools](#)

Games and Activities

[PBS Kids - Curious George](#)
[K-5 Math Teaching Resources](#)
[Math Playground – Thinking Blocks](#)
[Mathwire](#)
[FunBrain](#)
[Fuel the Brain](#)
[National Library of Virtual Manipulatives \(NLVM\)](#)
[Dr. Mike's Math Games](#)
[Scholastic Study Jams](#)

Videos

[Learn Zillion](#)
[Teaching Channel](#)
[Three-Act Math Tasks](#)